

Amendments to the Specification:

Please replace paragraph [0066] with the following amended paragraph:

[0066] Next, as per block 640, the proximity motion detection system performs a regression analysis on D_n with respect to n and determines the regression coefficient b and the coefficient of determination R . In block 650, the proximity motion detection system next determines the increase in signal strength from the start to the end of the proximity motion. Proximity motion is preferably registered when the regression coefficient b can be approximated as $\Delta P/(n_{max} - 1)$; where ΔP is the change in signal strength and $n_{max} - 1$ is the total number of signal strength samples. Next the proximity motion detection system determines if the conditions of Eq. 3 are met as per block 660, and Eq. 4 as per block 670.

$$b \geq \frac{\Delta P}{n_{max} - 1} \quad b \geq \frac{\Delta P}{n_{max} - 1} \quad (3)$$

$$R > \alpha \quad (4)$$

Please replace paragraph [0067] with the following amended paragraph:

[0067] If ~~neither of the signal strength determination~~ the conditions of Eqs. 3 and 4 in block 660 and block 670 are satisfied, the processing algorithm ends at block 680. If, on the other hand, neither of the two conditions are satisfied, the proximity motion detection continues to calculate the start of the proximity motion to the end of the proximity motion. As mentioned above, the implementation of the present invention for detecting movement from about 30 cm to 60 cm separation to less than 5 cm, the change in the resulting signal strength change ΔP being approximately 20 dBm. In a regression analysis of signal strength, a

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threshold value for the coefficient of determination α which is higher than about 0.70 indicates a strong correlation. This level of correlation is indicative that proximity motion has been detected within the present invention.